

## How silos can be bridged to achieve a global accord on market-based measures for mitigating aviation carbon emissions

Mon 10 June 2013 – In October 2012 WWF (the World Wide Fund for Nature), concerned with the contribution of aviation emissions to climate change, convened a high-level aviation stakeholders group to “generate new perspectives, identify policy options and trade-offs, and find areas of consensus” in addressing air transport carbon emissions. The exercise was designed to provide helpful input to ICAO and its member States in their ongoing negotiations towards a global accord on mitigation of international aviation emissions. Participants included government ministers and officials from developed and developing countries with responsibilities for aviation, transportation, tourism and the environment; global, regional and national aviation industry representatives; the tourism sector; and NGOs. Chris Lyle, an invited stakeholder straddling air transport and tourism, gives his individual take on the exercise so far and the next steps.

ICAO continues to do a formidable job with its UNFCCC mandate on aviation emissions mitigation in technical and operational developments, in propounding and disseminating the action plans of States ([see GreenAir article](#)), and in promoting the evolution of alternative fuels. However, because of growth in traffic, aviation emissions are likely to outpace technical and operational improvements for the foreseeable future.

The gap is envisaged to be filled through market-based measures (MBMs) in order to achieve ICAO’s aspirational goal of “keeping the global net carbon emissions from aviation from 2020 at the same level”. This gap has been shown in independent studies to be substantial even in the best scenario case for biofuels, and is potentially very large indeed ([see GreenAir article](#)). But ICAO faces an increasingly uphill task with its work on MBMs in resolving a perceived conflict in the uniform application provisions of the Chicago Convention and the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR&RC) of the UNFCCC ([see GreenAir Commentary article](#)).

This is the issue on which the WWF initiative homed in, with a creative *modus operandi*

- involving a wide range of stakeholders both within and beyond the aviation ‘silo’;
- holding meetings under Chatham House Rules to encourage openness and creativity; and
- using professional consensus-building facilitators to lead the discussions.

The process involved workshops in Washington and Berlin, and numerous conference calls and e-mail exchanges over several months. WWF itself has strived to play a strictly neutral role in the ‘Stakeholders Group’ (SG). The SG has now arrived at some tentative views which should not be seen as consensus positions but rather as reactions to ‘straw person’ proposals, that is to brainstormed simple drafts intended to generate discussion and provoke the generation of improved ideas.

### Differential obligations by route

The concept of route differentiation to resolve the ICAO/UNFCCC principles is not new ([see GreenAir Commentary article May 2009](#)). In the build up to the UNFCCC Conference of the Parties meeting in Copenhagen in 2009, it formed the basis of proposals by both the Association of European Airlines (AEA) and the Aviation Global Deal Group (a like-minded group of six airlines, an airport authority and The Climate Group) regarding the integration of aviation emissions into a post-Kyoto agreement. The concept was soon afterwards subsumed by IATA/ATAG in the interest of having a ‘one size fits all’ global commitment. But route differentiation, *inter alia* maintained and promoted independently by the World Tourism Organization, is gaining traction in government and other circles, and it is now accepted by IATA if CBDR&RC is to be taken into account. The WWF SG sees route differentiation as a key catalyst.

The SG suggests two alternatives. The first would be based on national indicators or globally defined categories of economic development. The approach is similar to that of AEA but emphasising the need to break through the

current impasse in the UNFCCC between Annex I (AI, developed) and non-Annex I (NAI) countries by, for example, breaking the latter into two tiers. This would be a non-static delineation, which would account for changes over time. The second alternative would be to differentiate on the basis of aviation characteristics of the route (for example city-pair or region-pair). All routes would be covered from the outset, but flights on fast growing routes would receive a greater share of the allowance pool than would those on slow growing routes.

The SG notes, however, that while this second approach would provide a tool for addressing the concerns of some developing countries within Chicago Convention boundaries, it would not on its own address the special circumstances of Least Developed Countries (LDCs) or of Small Island Developing States (SIDS).

As for the different treatment to be applied by route, the SG offers three alternatives: phase-in with time-limited exemptions; differentiated target levels; and/or differentiated compliance obligations, for example varying submission allowances per tonne of emissions relative to a common target level.

### **Channelling of revenues**

The SG also considered an indicative approach of resolving the ICAO/CBDR&RC issue whereby all carriers would participate in a global MBM revenue channelling scheme and it would apply to all international routes. Revenue would be generated through an auction under a global trading system, through a transaction levy on project credits in an offsetting scheme, or through an emissions levy that would cover all emissions. There could thus be common treatment at the operator level. Differentiation would occur during the distribution of revenues, for example to ensure no net incidence on developing countries, that is to avoid a negative impact on these countries; even if a finance mechanism includes contributions from a developing country, each developing country should receive more funding from such a mechanism than they contribute to it.

The notion of revenue use and channelling under the heading of innovative climate finance instruments is again not new, but there has been strong opposition to generation of revenue in ICAO, whether as stand-alone or as build-on to a measure such as carbon offsetting. To the degree that the notion of revenue is tolerated in aviation circles, there is strong resistance to using it for out-of-sector purposes. However, within the SG there was significant support for some revenue to be used for climate action in developing countries.

The use of revenues has historically not been very convincing to developing countries, including the most vulnerable countries. The response typically centres on the financing obligations of developed countries, and concerns that global measures could shift the obligations to developing countries. Also, developing countries have indicated their apprehension that the revenue generated would be used for general budgetary purposes and not be channelled to addressing climate change. Finally, concerns have also been expressed that there may be unintended consequences, such as risks to national economies due to sector-wide applied obligations. Therefore, a combination of revenue-raising with ringfencing and a time limited exemption as in the differential obligations by route approach above might lead to greater political acceptability.

An alternative to distribution of financial resources directly would be to distribute emissions allowances, with recipients having the right to monetise them. Allowances could be distributed to specific countries, for example those in certain political categories such as NAI or those below a certain income and emissions threshold, which would then auction them and generate finance in order to support low carbon development and investment in those same countries. Allowances could also be channelled to funds, such as the Green Climate Fund, to generate revenue. Again, a combination of revenue-raising with ringfencing and a time limited exemption as in the differential obligation by route above might lead to greater political acceptability.

### **Precedents for UNFCCC climate negotiations**

While international aviation emissions, in parallel with maritime emissions, were treated independently under the

Kyoto Protocol, with AI States mandated to pursue mitigation through ICAO, there has remained a concern that action by ICAO – which would in practice apply to all ICAO’s 191 States – would create a precedent for the broader UNFCCC negotiations for a global climate agreement. The WWF SG addressed this issue in some depth.

The question is ultimately connected to the principle of CBDR&RC. The primary concern is the perceived potential contradiction between global measures under ICAO that do not differentiate or distinguish between aircraft, airlines and countries, and the recognition under the UNFCCC that distinctions should be made between different countries based on their common but differentiated responsibilities for causing the problem, including historical responsibilities and respective capabilities in responding to climate change. A major barrier to progress would be removed if a way can be found, acceptable to developing and developed countries alike, to ensure that enhanced interpretation of CBDR&RC specific to international aviation does not set legal precedents for the negotiations under the UNFCCC.

A route-based approach, complemented by reference to respective provisions of the Chicago Convention in the context of the UNFCCC, could achieve this. Furthermore, international aviation, along with maritime transport, was recognised at the time of the adoption of the Kyoto Protocol in 1997 as a uniquely global sector that requires co-ordinated international action, and measures to address emissions from this sector should not prejudge the outcome of negotiations for other sectors. A solution could simply be to respond in a statement explicitly to the concern about creating legal precedents, setting out the associated reasoning.

### **Market-based measure options**

As a complementary exercise, the WWF SG looked at types of MBM and developed three ‘straw person’ package options and their design trade-offs:

- offsetting, with or without revenue generation, i.e. two of the three options remaining under ICAO consideration;
- cap and trade, i.e. the third ICAO option; and
- a levy.

The levy option had been summarily dismissed by ICAO but would be a clear and straightforward means based on volume of fuel burned and could have certain other advantages if appropriately designed. However, it also has some disadvantages, most notably that it may not be environmentally effective.

For each of the selected MBM options, the SG has provided some insight as to design considerations and trade-offs, and the related interests of tourism, developing countries, developed countries, the aviation sector and NGOs. The overlapping interests in each case are:

- climate finance for in-sector investment;
- avoidance of competitive distortion;
- an industry-managed system, perhaps in conjunction with ICAO or other global body to distribute any revenues generated;
- a route-based approach instead of a country-based system;
- differentiation principles applied for developing and long-haul tourism-dependent countries; and
- putting a global carbon price on aviation.

### **Global airline industry strategy update**

IATA’s Annual General Meeting in Cape Town on June 3 endorsed a resolution on [Implementation of the Aviation Carbon-Neutral Growth Strategy](#) intended to provide ICAO and governments with a set of principles on how governments could establish procedures for a single MBM – with preference expressed for a mandatory carbon offsetting scheme – integrated as part of an overall package of measures to achieve carbon-neutral growth from 2020. The resolution proposes principles for determining responsibilities for individual aircraft operators, including baselines, provisions for early movers prior to 2020, for new entrants, and for fast- and high-growth carriers.

## Next steps

The WWF stakeholder exercise is considered very much a work in progress. WWF is now distributing widely two SG papers on CBDR&RC and on MBMs regarding the 'straw person' proposals, in individual countries and within the ICAO framework. The intention is to engage a broader, cross-sector community – both in terms of geographical representation and in terms of stakeholder participation, notably to include trade and finance – in advancing the global negotiations on mitigation of aviation emissions. The new IATA resolution will also clearly enter into the mix.

The ICAO exercise is in itself a work in progress. In May, the ICAO Council received from its High Level Group on International Aviation and Climate Change a draft Resolution for the ICAO Assembly Session in September that included a considerable number of widely differing alternative options and much square-bracketed text. The Council has started a process of streamlining the text but there is limited time remaining in its current Session (which closes on June 21) and the Council will wish to take into account the results of a study on assessment of the impact of MBMs which is about to become available. The expectation therefore is that a finalised draft Resolution will only be achieved at a pre-Assembly meeting of the Council in September and discussions are almost certain to continue into the Assembly itself.

In the meantime, bilateral and broader consultations will no doubt continue. WWF hopes that by concentrating at strategic policy level with a non-partisan, 'bird's-eye view' agenda and going beyond the aviation 'silo', its ongoing SG work will facilitate this process.

The two working documents on which this summary article is based, ['Bridging the political barriers in negotiating a global Market Based Measure for controlling international aviation emissions'](#) and ['Areas of Alignment on Global Market-Based Measures \(MBMs\) to Address Aviation Emissions'](#) can now be downloaded.

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